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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
VO, TED T				
ART UNIT		PAPER NUMBER		
2191				
NOTIFICATION DATE		DELIVERY MODE		
10/03/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeciipaw.com

Office Action Summary

Application No.

10/675,721

Applicant(s)

LEVINE ET AL.

Examiner

TED T. VO

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This action is in response to the communication filed on 07/09/2008.

Claims 1-2, 25 are pending in the application.

Response to Arguments

2. This is in response to the argument remarks filed on 07/09/2008. Applicants argued that a prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims, where Applicants alleged that Intel does not teach or suggest "identifying a routine that is used more than a threshold number of times during execution of the program as a routine of interest."

Examiner's response: Applicants' argument is improper. It should be noted that anticipation of a prior requires the prior art either expressly or inherently discloses each limitation of a claim. Under the principles of inherency, if the prior art necessarily functions in accordance with or includes, the claims limitation, it anticipates. *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375-76, 77 USPQ2d 1321, 1325-26 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565, 24 USPQ2d 1321, 1326 (Fed. Cir. 1992). Anticipation of a patent claim requires a finding that

the claim at issue "reads on" a prior art reference. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346, 51 USPQ2d 1943, 1945 (Fed Cir. 1999).

Moreover, the argument should address to elements that present the patentability of a claim. In the claimed recitation, the element argued does not produce any new or unexpected result. It reads on common acts, and seen in the Intel reference. It should be noted that profiling is a process of identifying the number of executions during running a program. This is well known in the art. It should be noted that a threshold number is a predetermined value set by a programmer to monitor the performance of an execution. Therefore, when a reference wrote, "a predetermined value", it would be understood as "more than one". It should be noted that with one or more than one, there is no patentable difference because a user can set one or more than threshold values into a routine to examine. On the other hand, "threshold of number of times" as recited is corresponding to the setting of the numbers of clock cycles in the specification. The setting is only formal technique in which any programmer can do. Intel teaches the same. See Sec. 6.1.1.3, p. 6-3.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Intel, "Intel IA-64 Architecture Software Developer's Manual", Revision 1.1, Vol. 4, No. 245320-002, 7-2001.

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 1:

A method in a data processing system for monitoring execution of instructions, the method comprising:

executing a program; identifying a routine that is used more than a threshold number of times

(See sec. 6.1.2 "profiling", refer to "performance monitor counts have to be associated with program locations ('identifying a routine')"). Further more see sec. 6.1.1.2, 6.1.1.3 (p.6-3), sec. 6, p. 6, see event counter; The profiling' counter events are calculating based on times) *during execution of the program as a routine of interest* (See sec. 6.1.1.3, particularly, see its second paragraph. Intel discloses an identifying of a routine such as a benchmark is tested with different threshold values for identifying the performance "knee");

responsive to identifying the routine of interest during execution of the program, dynamically associating instructions in the identified routine of interest with a set of performance indicators (sec. 6, p.7, i.e. triggers on events shown in table 6-2, see in the near end of the page, "registers indicate to...", see table 6.3, p. 10-11, and sec. 6, p. 13, "PMC/PMD

register assignments for each monitoring feature...”) ***to form a modified routine having the instructions*** (See sec. 6, p. 5, “are interesting identifying performance bottlenecks and relating them back to their source code”: *identifying a routine of interest during execution of a program; then see “code instrumentation”, in p. 26 of sec 6), wherein the set of performance indicators comprises one or more bits located in fields within the instructions in the modified routine* (See Figure 6-5, that detects indicators as instructions instrumented in the IA-64 instruction execution. These instructions are seen in sec. 7, such as instruction PIPELINE_FLUSH. Also see “performance monitor events , event counters, seen in sec. 6.1.2.2, and 6.1.2.3, p. 3, or program counter sampling for identifying hot spot, see in sec. 6, p.6 – Note: See a performance counter “monitor ++” that is implemented in a program shown in sec. 7, p.25, if take performance counters as performance indicators then each of these counter comprising 32-bits), ***and wherein the set of performance indicators identifies that the instructions in the modified routine are to be monitored*** (For example, monitoring cache; or see sec. 6.2.2 for setting maximum per-cycle event increment, etc); ***and***

responsive to execution of an instruction of the instructions in the modified routine (i.e. the routine contains hotspot results by profiling) ***during continued execution of the program, incrementing a counter*** (i.e., the performance counters. For example, see sec. 6, Figure 6-5, p. 7), ***wherein the counter provides a value identifying a number of times that the instruction of the instructions in the modified routine is executed*** (e.g. sec. 6.2.2, p.16 of sec. 6).

As per Claim 2: Intel discloses, The method of claim 1 further comprising: associating other instructions in a second routine of interest with a second set of indicators to form a second

*modified routine having the other instructions (Intel discloses a program that has many routines, and each of routine in monitored); **and responsive to execution of another instruction of the other instructions in the second modified routine, incrementing a second counter, wherein the second counter provides a value identifying a number of times that the other instruction of the other instructions in the second modified routine is executed** (See sec. 6, Figure 6-5, p. 7).*

As per Claim 25: See rationale addressed in the rejection of claims 1-2 above.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTV
September 22, 2008

/Ted T. Vo/
Primary Examiner, Art Unit 2191